

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the subject application. The Final Office Action of July 29, 2003 has been received and its contents carefully reviewed.

The Examiner rejected claims 1-3, 8-12, 17, 18, 23, 24, 27, and 29-31 under 35 U.S.C. § 102(b) as being anticipated by Franklin et al. (European Pat. App. Pub. No. 0 477 882 A2); and rejected claims 4-7, 13-16, 19-22, 25, 26, and 28 under 35 U.S.C. § 103(a) as being unpatentable over Franklin et al. in view of Moseley et al. (U.S. Pat. No. 6,046,849). These rejections are traversed and reconsideration of the claims is respectfully requested in view of the following remarks.

The rejection of claims 1-3, 8-12, 17, 18, 23, 24, 27, and 29-31 under 35 U.S.C. § 102(b) as being anticipated by Franklin et al. is respectfully traversed and reconsideration is requested.

Claim 1 is allowable over the cited references in that claim 1 recites a combination of elements including, at least “a polarizer...; a transparent substrate on the polarizer; and a patterned retarder layer for separating light polarization passes through the polarizer and the transparent substrate...” None of the cited references, including Franklin et al., singly or in combination, teaches or suggests at least these features of the claimed invention. Accordingly, Applicant respectfully submits that claims 2-10 and 31, which depend from claim 1, are also allowable over the cited references.

Claim 11 is allowable over the cited references in that claim 11 recites a combination of elements including, for example “a retarder layer on a transparent substrate..., the retarder layer for polarizing light and modulating polarization from the transparent substrate... wherein said transparent substrate is adhered to the polarizer.” None of the cited references, including

Franklin et al., singly or in combination, teaches or suggests at least these features of the claimed invention. Accordingly, Applicant respectfully submits that claims 12-16, which depend from claim 11, are also allowable over the cited references.

Claim 17 is allowable over the cited references in that claim 17 recites a combination of elements including, for example “preparing a ...transparent substrate...; forming a retarder layer on the transparent substrate...; and adhering the transparent substrate to the polarizer.” None of the cited references, including Franklin et al., singly or in combination, teaches or suggests at least these features of the claimed invention. Accordingly, Applicant respectfully submits that claims 18-22, which depend from claim 17, are also allowable over the cited references.

Claim 23 is allowable over the cited references in that claim 23 recites a combination of elements including, for example “a polarizer...; a transparent substrate on the polarizer; and a patterned retarder layer on said polarizer, said retarder layer including a plurality of first areas cells for separating light passed through said polarizer into a left-eye picture and a plurality of second areas cells for separating light passed through said polarizer into a right-eye picture; wherein said plurality of first cells areas and said plurality of second cells areas are patterned in accordance with said predetermined pattern of said left-eye and right-eye modulated light.” None of the cited references, including Franklin et al., singly or in combination, teaches or suggests at least these features of the claimed invention. Accordingly, Applicant respectfully submits that claims 18-22, which depend from claim 17, are also allowable over the cited references.

Further, the Examiner cites Franklin et al. as teaching “a patterned retarder layer (22) which is formed on a transparent substrate (fig. 3, 62)... ; wherein the transparent substrate is adhered to/on the polarizer (figs. 7 or 8a - the transparent substrate is within the retarder which is

adhered to/on the polarizer in these display embodiments)...; and wherein the patterned retarder layer includes a plurality of first area cells (26) for separating light polarization passed through the polarizer and the transparent substrate into a left-eye picture and a plurality of second area cells (24) for separating light polarization passed through the polarizer into a right-eye picture, wherein the plurality of first area cells and the plurality of second area cells are patterned in accordance with the predetermined pattern of said left-eye and right-eye modulated light (column 2, lines 7-35) and wherein the first and second cell areas are in alternating lines.” (Office Action at 2.)

According to M.P.E.P. § 2131, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single reference.

With respect to the rejection of claims 11 and 17, and their respective dependent claims, Applicant respectfully submits Franklin et al. teaches at column 3, lines 36-38 “Retarder 22, composed of liquid crystal, appears to provide the best overall performance characteristics.”

Referring to Figure 3 of Franklin et al., Franklin et al. teaches at column 4, lines 36-49

“The preferred embodiment is an attached liquid crystal retarder cell 22 to the front of flat panel 12. ...Figure 3 reveals the construction of a basic [liquid] crystal retarder 22. Retarder 22 is constructed in a sandwich fashion. Transparent electrode (ITO) 52 is a layer on substrate 54. A layer of polyimide 62 is on ITO 52. Similarly, ITO 56 is a layer on substrate 58. A layer of polyimide 60 is on ITO 56. Between layers 60 and 62 is liquid crystal 64 and spacers 66 which maintain a particular distance between parallel layers 60 and 62.”

Accordingly, Franklin et al. teaches wherein the retarder 22 is a multi-component system which contains as a constituent part, the layer of polyimide 62. Since the retarder 22 contains the layer of polyimide 62, Applicant respectfully submits the retarder 22 cannot be formed on the layer of polyimide 62, as asserted by the Examiner.

Further, and with respect to the rejection of claims 1 and 23, and their respective dependent claims, Applicant respectfully submits Franklin et al. teaches in reference to Figure 3 and column 4, line 49 - column 5, line 32,

“The maximum retardance of a tunable liquid crystal retarder 22 occurs at zero voltage and is determined by the thickness of the liquid crystal, just as in the determination with solid crystal retarders. A voltage applied to the cell decreases the amount of retardation introduced until a saturation voltage zero retardance is obtained. ...The present embodiment uses a cell designed to have a retardation difference of one-half wave between the “off on” state of the cell. Ideally, this cell will have one-half wave retardation at zero volts and zero retardation at any voltage greater than the saturation voltage. ...The result is two available states of retardation...”

Figure 5 illustrates one way of achieving retardance of appropriate rows 14 and 16 of panel 12. A set of electrodes 30 are superimposed over alternate rows of flat panel 12. ...Electrodes 30 over alternating rows drive these rows with voltage sufficient to provide overall one-quarter wave retardation. Rows 32 without electrodes retain their original three-quarter wave retardation.

An alternate approach, shown in Figure 6, has electrodes over each of the rows of panel 12. Interleaved indium tin oxide (ITO) electrodes 34 and 36 are placed over the rows of panel 12, allowing one voltage to be applied to all odd rows 34 and another voltage applied to even rows 36...”

However, Franklin et al. teaches in reference to Figure 2b and at column 4, lines 4-24,

“Another material, mica, may be used in construction of retarder 22... Mica is a natural crystal that can be used in very thin pieces. Effective quarter wave, three-quarter wave steps may be etched in the mica to appropriate thicknesses. Such mica is bonded to the front of a display panel. ...A cover glass or durable coating can be applied over the mica or other materials for protection.”

Accordingly, Applicants respectfully submit that while the liquid crystal retarder 22 as described with reference to Figures 3-7 of Franklin et al. includes the layer of polyimide 62, the liquid crystal retarder 22 cannot be reasonably interpreted as a patterned retarder, including a

plurality of first area cells (26) and second area cells (24) for variously separating light polarization, as asserted by the Examiner. (see Franklin et al., column 4, line 49 - column 5, line 32)

The solid crystal retarder 22 described with reference to Figures 1, 2a, and 2b of Franklin et al. can, however, be reasonably understood to be provided as a patterned retarder having the plurality of first area cells including a plurality of first area cells (26) and second area cells (24) for variously separating light polarization. (see Franklin et al., column 4, lines 4-24) However, Franklin et al. is completely silent as to any layer of polyimide 62 (or equivalent layer thereof) used in conjunction with the solid crystal retarder layer 22 as described with reference to Figures 1, 2a, and 2b of Franklin et al.

Taken as a whole, Applicant respectfully submits Franklin et al. teaches at least two distinct embodiments in which the retarder 22 is provided: (1) a solid crystal retarder, formed of material that is etched to appropriate thicknesses to generate quarter wave and three-quarter wave steps; and (2) a liquid crystal retarder, constructed from a multitude of components including a layer of polyimide, electrodes, and a layer of liquid crystal material having axes whose orientation is adjustable in the presence of an applied voltage to generate quarter wave and three-quarter wave states of retardation.

In view of the Examiner's citation and interpretation of Franklin et al., it appears as though unrelated textual clauses from distinct embodiments, as described above, have merely been assembled together in an attempt to arrive at the claimed invention. Given the fact that disparate teachings from separate embodiments Franklin et al. have been woven together by the Examiner, Applicant respectfully submits Franklin et al. is not available as a reference under 35 U.S.C. § 102. Moreover, Applicant respectfully submits it would not have been obvious to

combine the teachings of Franklin et al. and arrive at the claimed invention absent impermissible hindsight reasoning. Even when obviousness is based on a single reference, there must be a showing of some objective suggestion or motivation to modify or combine the teachings of that reference.

Accordingly, Applicant respectfully submits a *prima facie* case of anticipation has not been established with respect to the present invention defined, at least in part by independent claims 1, 11, 17, and 23.

The rejection of claims 4-7, 13-16, 19-22, 25, 26, and 28 under 35 U.S.C. § 103(a) as being unpatentable over Franklin et al. in view of Moseley et al. is respectfully traversed and reconsideration is requested.

Claims 4-7 include all of the limitations of claim 1 and claim 28 includes all the limitations of claim 23, as discussed above, and Franklin et al. fails to teach or suggest at least these features of the aforementioned independent claims as recited above. Similarly Moseley et al. fails to cure the deficiencies of Franklin et al. Accordingly, Applicant respectfully submits that the Examiner has not established a *prima facie* case of obviousness regarding claims 4-7 and 28 in view of claims 1 and 23, as above.

Claims 13-16 and 19-22 include all the limitations of claims 11 and 17, respectively, as discussed above, and Franklin et al. fails to teach or suggest at least these features of the aforementioned independent claims as recited above. Similarly Moseley et al. fails to cure the deficiencies of Franklin et al. Accordingly, Applicant respectfully submits that the Examiner has not established a *prima facie* case of obviousness regarding claims 13-16 and 19-22 in view of claims 11 and 17, as above.

Applicant believes the foregoing remarks place the application in condition for allowance and early, favorable action is respectfully solicited. Should the Examiner deem that a telephone conference would further the prosecution of this application, the Examiner is invited to call the undersigned attorney at (202) 496-7500.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136. Please credit any overpayment to deposit Account No. 50-0911.

Respectfully submitted,

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By



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